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EPIDEMIOLOGIC NOTES AND REPORTS

PLAGUE – New Mexico

On Oct. 17, 1969, a case of plague was reported from New Mexico in a 13-year-old girl from Los Alamos. On September 29, she had onset of malaise, fever, shaking chills, raised red lesions on her left arm, and tenderness of the neck and left axilla. These symptoms became worse, and on October 1, she was hospitalized. She gave no history of contact with wild rodents, but had been on an outing on September 28 to collect piñon nuts (pinecones).

On admission, she had a temperature of 102.4°F. and marked left axillary lymphadenopathy with erythema extending to the left breast. Blood cultures were done, and she was given 250 mg tetracycline intramuscularly and was started on 250 mg orally four times per day. On October 3, the blood cultures were positive for gram-negative rods, that were sensitive to tetracycline, ampicillin, and chloramphenicol. Ampicillin in doses of 500 mg orally four times per day was started. On October 5, she became afebrile and was discharged. She continued medication at

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TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	42nd WEEK ENDED		MEDIAN	CUMULATIVE, FIRST 42 WEEKS		
	October 18, 1969	October 19, 1968	1964 - 1968	1969	1968	MEDIAN 1964 - 1968
Aseptic meningitis	79	140	61	2,768	3,571	2,410
Brucellosis	3	3	4	185	185	206
Diphtheria	3	14	5	142	180	158
Encephalitis, primary:						
Arthropod-borne & unspecified	31	37	56	1,030	1,126	1,540
Encephalitis, post-infectious	3	4	4	262	405	630
Hepatitis, serum	107	134	718	4,239	3,634	31,071
Hepatitis, infectious	947	1,027		37,791	36,355	
Malaria	153	40	26	2,459	1,874	368
Measles (rubeola)	125	136	635	21,142	20,258	192,131
Meningococcal infections, total	32	26	39	2,501	2,161	2,251
Civilian	31	26	- - -	2,294	1,977	- - -
Military	1	–	- - -	207	184	- - -
Mumps	897	1,177	- - -	71,554	129,567	- - -
Poliomyelitis, total	–	2	2	15	50	50
Paralytic	–	2	1	14	50	50
Rubella (German measles)	312	292	- - -	50,675	45,181	- - -
Streptococcal sore throat & scarlet fever	6,179	7,219	6,625	336,696	338,360	338,360
Tetanus	2	6	6	123	144	183
Tularemia	3	–	3	118	157	157
Typhoid fever	10	9	10	255	314	343
Typhus, tick-borne (Rky. Mt. spotted fever)	8	3	2	423	265	245
Rabies in animals	44	47	58	2,773	2,835	3,561

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	3	Rabies in man:	1
Botulism:	12	Rubella congenital syndrome:	9
Leptospirosis:	64	Trichinosis: N.J.-1, Ohio-1	165
Plague: N. Mex.-1	4	Typhus, murine: Ala.-1, Tex.-7	43
Psittacosis:	35		

PLAGUE – *(Continued from front page)*

home, and although mild malaise persisted, she was able to return to school by October 14. The patient also had persistent fluctuant left axillary adenopathy which was subsequently incised and drained. She is presently asymptomatic and well.

On October 14, phage typing of the blood cultures was positive for *Pasteurella pestis*.

The patient had contact with a family dog, cat, and two pet rabbits, all of which have remained well. There have been no other illnesses in her family members who also went on the outing on September 28.

Trapping of animals in the area where the family outing was held is being done in an effort to determine the source of the girl's infection.

(Reported by Bruce Storrs, M.D., Director, and T. H. Tamlinson, Jr., M.D., Division of Medical Services, Bryan Miller, Chief, General Sanitation Section, and the Public Health Laboratory, New Mexico Department of Health; and Irene U. Boone, M.D., Physician, Los Alamos.)

FOOD AND DRUG ADMINISTRATION WARNING CONTAMINATED DETERGENT SOLUTION

The Food and Drug Administration on October 20 issued a nationwide warning against use of 49 types of urethral catheter trays and kits produced by C. R. Bard Inc. because of the possibility of serious infection. The catheter trays and kits contain a detergent solution, Detergicide, which has been found contaminated with pseudomonas a potential harmful bacteria, and its use may result in severe genital urinary infections.

Dr. Herbert L. Ley, FDA Commissioner, said it was particularly urgent that nursing and convalescent homes, doctors, and urologic clinics be made aware of the potential hazard. C. R. Bard Inc. of Murray Hill, New Jersey, recalled the products only from its distributors and hospitals in the United States and Canada. The FDA has extended the recall to all others who would have occasion to use them.

The Detergicide solution is intended for cleansing and sanitizing the external area of catheter insertions. The urethral catheter trays and kits list the detergicide component on the outside label of the package in one of the following ways – "Detergicide", "Detergicide Prep Solution", "Cleansing Solution", or "Antiseptic Towellette".

Hospital authorities have reported infections associated with the use of the contaminated Detergicide. According to FDA all other components of the catheter trays and kits were found to be sterile.

All hospitals, urologic clinics, nursing and convalescent homes, and doctors are urged to promptly check their stock and immediately return any of the recall products to their supplier. If no kits are available, the ones on hand can be used, but the Detergicide cleansing solution must be discarded and replaced by a sterile solution.

Editorial Note:

Twenty kits from a particular lot number of the packaged detergent solution were examined in the laboratories of the NCDC. All were found to be contaminated with a pure growth of about 10,000 to 100,000 colonies per ml of a pseudomonas-like bacterium resembling *Pseudomonas kingii* and classified as EO-1. The cultural characteristics are defined as follows:

After inactivation of benzalkonium in the original solution, growth on blood agar at 35-37°C. yields colonies 0.5 to 1.0 mm in diameter at 18-20 hours. The colonies are convex, circular, smooth, translucent to semiopaque and nonpigmented. Colorless colonies, less than 0.5 mm in diameter, are produced on MacConkey agar at 18-20 hours. By 48-72 hours the colonies are approximately 1.0 mm in diameter. The organisms are gram-negative, medium-sized rods, frequently with bipolar staining.

The outstanding characteristic of the EO-1 organisms is the production of a nonsoluble yellow pigment on TSI or Kligler agar slants. This may not be evident until incubated 48-72 hours. Pigmentation is not observed on a nutrient medium such as Heart Infusion agar. Occasional nonpigmented strains have been encountered.

In an oxidation-fermentation (OF) medium, acid is produced from glucose oxidatively. Most strains also produce acid from xylose, lactose, sucrose, and maltose in an OF medium. Mannitol usually remains neutral or becomes weakly acid.

Cultures on agar slants have become nonviable in 3-4 days. Agar-stab cultures have been maintained for several weeks.

(Reported by Microbiological Control Section, Bacterial Diseases Branch, Epidemiology Program, and the Bacterial Reference Unit, Bacteriology Section, Microbiology Branch, Laboratory Division, NCDC.)

INTERNATIONAL NOTES
DYSENTERY – Guatemala

In January 1969, an increase of severe dysentery was reported from three villages in South Guatemala. Subsequently, reports of a similar severe form of diarrhea were received from towns and villages in widely scattered parts of the country. Cases occurred in all age groups, with high mortality rates especially in school and pre-school children. *Shigella dysenteriae* type 1 (Shiga's bacillus) was isolated in August and has since been confirmed by bacteriologic and serologic methods in several areas where outbreaks have occurred.

Severe rains and flooding may have been a factor in recent spread. Similar flood conditions in neighboring countries and reports of dysentery near international borders raise the possibility of involvement of areas outside Guatemala.

In vitro antibiotic sensitivity studies have indicated that the organism is resistant to tetracycline, chloramphenicol, novobiocin, and sulfamethoxpyridazine. Preliminary results indicate that erythromycin, kanamycin, and nalidixic acid are clinically effective. An epidemiologic investigation is in progress.

(Reported by Dr. Cesar A. Mendizabal Morris, Director of Epidemiology, Ministry of Public Health and Social Assistant of the Government of Guatemala, Guatemala, Central America; Dr. Leonardo J. Mata, Chief, Division of Microbiology, Institute of Nutrition of Central America and Panama, Guatemala, Central America; and an EIS Officer.)

Editor's Note:

Shigella dysenteriae 1 is an extremely rare serotype accounting for only a fraction of one percent of all isolates reported in the United States. Recently, however, there has been a significant increase in the number of isolates reported. In 1964 none were reported, in 1965 there was one; in 1966 and 1967, there were two each year and in 1968 three. In 1969, however, a total of 12 isolates have thus far been reported, nine in the third quarter. Epidemiologic information available on five of these isolates indicates that four infections were acquired after travel to Mexico and one after travel to Ethiopia.

The last reported outbreak of dysentery due to the Shiga bacillus in the United States occurred in the summer of 1938.[1] The outbreak spread from a group of migrant Mexican workers to individuals in the City of Owosso, Michigan. Person-to-person transmission was the alleged mode of transmission. The disease was of a virulent type with 10 deaths among 45 recognized cases, a fatality rate of 22.2 percent, all in children under age 8. A similar high fatality rate was reported by Japanese workers early in the century when the disease was endemic in that country.

Patients who develop diarrhea during or after travel to Mexico or countries of Central America should be cultured to rule out *S. dysenteriae 1* infections. The severe form of the disease has a characteristic picture of diarrhea with blood and mucous usually with tenesmus, dehydration, prostration, and fever. Milder forms of the disease cannot be differentiated from diarrhea due to a variety of other causes. A serologic test is available to assist in diagnosis.

Reference:

[1]Block, N. B., and Ferguson, W.: An Outbreak of Shiga Dysentery in Michigan, 1938. Amer J Public Health, *30:*43-52, 1940.

EPIDEMIOLOGIC NOTES AND REPORTS
RAT-BITE FEVER – Oklahoma and Texas

In July and August 1969, Oklahoma and Texas reported one case each of rat-bite fever. The first case was in a 19-month-old boy from Major County, Oklahoma, who, while sleeping on July 21, was bitten on the index finger of the right hand by a rat. Ten days later, he was hospitalized with a temperature of 104°F. and a generalized blanching macular rash, which had been present for 1 day. The finger lesion appeared indurated, but no organomegaly, joint inflammation, or regional lymphadenopathy was noted. His hematocrit was 34 percent; the white blood cell count was 10,300 per mm^3 with 48 percent polymorphonuclear cells, 23 percent bands, and 27 percent lymphocytes; the blood was negative for febrile agglutinins; and urinalysis was normal. Blood obtained on admission was cultured and after 3 days grew *Streptobacillus moniliformis*. Parenteral penicillin was started on admission; 36 hours later the child was afebrile and after 72 hours the rash had disappeared. The patient was discharged on August 7 after 1 week of parenteral penicillin.

The second case was in a physician's 9-year-old son, who on August 3 was bitten by a caged rat at a retail pet store in Houston. Five days later, he was hospitalized with headache, a temperature of 102°F., a bluish-red macular rash over the trunk and extremities, a pustular lesion with a necrotic center on the finger adjacent to the bitten finger, and polyarthritis. Admission cultures of both the finger pustule and blood grew *S. moniliformis*. The child was treated with 2 million units of intravenous penicillin per day with resolution of all signs and symptoms within 48 hours.

Six hooded rats had been purchased by the pet store owner in Houston on July 15. These rats were a male and female and their litter of four raised by a boy who had

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RAT-BITE FEVER – *(Continued from page 367)*

earlier bought the male and female from a different pet store. One rat was sold to an unidentified 15-year-old girl and two were sold as food for snakes. The remaining three showed no signs of illness, but oropharyngeal culture of each grew *S. moniliformis*. Oropharyngeal cultures of four gerbils, three hamsters, and one mouse in the shop were negative. The owner of the pet store has raised rats for 3 years and has sold an average of five to six per month; he had not previously noted disease in any of the animals. *(Reported by Charles Baker, M.D., R. D. Shuttee, M.D., and William Simon, M.D., Physicians, Enid, Oklahoma; Cecil Reinstein, M.D., Director, Garfield County Health Department; R. LeRoy Carpenter, M.D., Director, Division of Epidemiology, Oklahoma State Department of Health; John R. Montgomery, M.D., and John B. Young, M.D., Baylor University Department of Pediatrics; Robert McLeon, M.D., Director, Communicable Disease Division, and Charles A. Pigford, M.D., Director, Houston City Health Department; M. S. Dickerson, M.D., Director, Communicable Disease Division, Texas State Department of Health; and EIS Officers.)*

Editorial Comment:

Rat bites frequently occur in metropolitan areas with a population of 500,000 or more persons but are only occasionally a problem in rural or farming communities. Rat bites have increased in frequency coexistent with and proportional to the urbanization of the United States. The estimated present rate is 15 to 30 rat bites per 100,000 population per year or approximately 14,000 rat bites per year.[1]

Death from rat bites is rare and usually occurs in babies or immobile adults. In a study in Baltimore, rat-bite fever was reported to develop as secondary infection of the injury in up to 11 percent of cases.[2] In the United States rat-bite fever is commonly due to *S. moniliformis*. This illness is characterized by a 3 to 10 day incubation period, recurrent spiking fever, regional lymphadenopathy, arthritis, and bluish-red maculnr rash. If not treated, rat-bite fever may be fatal in up to 10 percent of cases.[2] Penicillin is the drug of choice, and streptomycin has been found effective in treating some patients who did not respond to penicillin.[3] Control of rat-bite fever is best accomplished by programs to reduce the rat population.

References:

[1]Scott, H. G.: Rat Bite: Epidemiology and Control, USDHEW, PHS Publication 1966.

[2]Richter, Curt P.: Incidence of Rat Bites and Rat Bite Fever in Baltimore. JAMA 128:324-26, 1945.

[3]Morton, Harry E.: Streptobacillus Moniliformis in *Bacterial and Mycotic Infections of Man*. Dubos, Rene J. and Hirsch, James G. (ed.). 4th edition, J. P. Lippincott Co., Philadelphia 1965, p. 767.

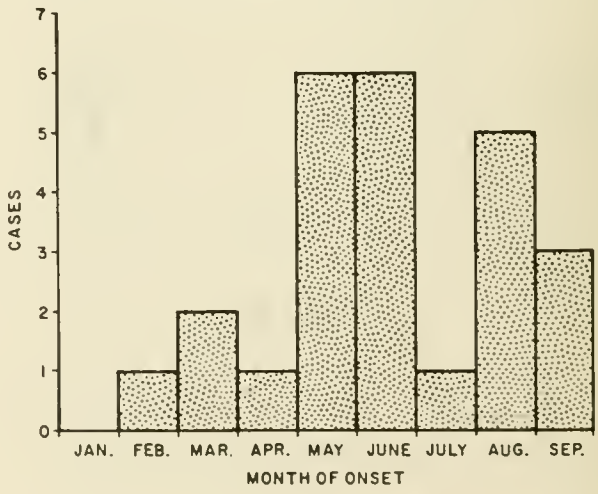
INFECTIOUS HEPATITIS – Cheshire County, New Hampshire

During the first 9 months of 1969, an outbreak of infectious hepatitis due to person-to-person transmission occurred in Cheshire County, New Hampshire. The epidemic involved 25 patients (Figure 1), twenty of whom resided in the town of Winchester (pop. 2,411, 1960 cen.), a rural community in the southwestern corner of the state; five resided elsewhere but had contact with patients in Winchester. Seven cases occurred among household members and 18 among close relatives, neighbors, or friends. Cases ranged in age from 9 to 43 years with most (10) occurring in the 10-14 nge group. There were 17 males and eight females.

All patients had classical symptoms of hepatitis including jaundice and/or dark urine; 12 were hospitalized and had abnormal liver function studies. None gave a history of parenternl inoculation, ingestion of raw shellfish, or known exposure to contaminated foods or drinking water. The standards of hygiene within the households of the majority of patients were low; children were unkempt and overcrowded in inadequate housing. The poor environ-

Figure 1

CASES OF INFECTIOUS HEPATITIS BY MONTH OF ONSET, CHESHIRE COUNTY, NEW HAMPSHIRE JANUARY-SEPTEMBER 1969



mental sanitation and close interpersonal contacts strongly suggested a fecal-oral route of transmission.

Local health officials and physicians have stressed the importance of good hygienic practices. Immune serum globulin has been administered to family contacts of several patients; however, three additional cases have been reported from the Winchester area in October. These cases are currently under investigation.

(Reported by Walter Kaupas, M.D., M.P.H., State Epidemiologist, and Arthur Van Buskirk, Public Health Advisor, Communicable Disease Control Bureau, New Hampshire Division of Public Health; and an EIS Officer.)

SURVEILLANCE SUMMARY
ENCEPHALITIS – United States 1968

In the United States during 1968, a total of 2,283 cases of encephalitis (260 fatal) were reported to the NCDC (Table 1). This compares with 2,368 cases (245 fatal) reported in 1967.

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Table 1
Cause of 2,283 Cases of Encephalitis (260 Fatal) Reported to NCDC, 1968

Category and Cause	Total Cases		Fatal Cases		Death Case Ratio (Percent)
	Number	Percent of Total	Number	Percent of Total	
Arboviral	130	5.7	9	3.5	6.9
WEE	17		–		
EEE	12		6		
CE	66		–		
SLE	35		3		
VEE	*				
Enteroviral (Confirmed)	66	2.9	1	0.4	1.5
Associated with Childhood Infections	502	22.0	20	7.7	4.0
Measles	19		1		
Mumps	408		2		
Chickenpox	69		17		
Rubella	6		–		
Associated with Respiratory Illnesses	17	0.7	4	1.5	23.5
Influenza	7		3		
Adenovirus	4		–		
M. pneumoniae	5		1		
RSV	1		–		
Associated with Immunization	13	0.6	3	1.2	23.1
Post-vaccinial	12		3		
Post-DPT	1		–		
Other	45	2.0	12	4.4	26.7
LCM	2		–		
Herpes simplex	35		12		
Herpes zoster	5		–		
Infectious mononucleosis	2		–		
Roseola	1		–		
Unknown and Complex Etiology	1,510	66.1	211	81.2	14.0
Diagnostic for 1 or more agents	77		2		
Diagnostic for 2 or more agents	1		–		
Unknown	1,431		209		
Total	2,283	100	260	100	11.4

*Although not included in the formal reporting, the only documented symptomatic human infection with Venezuelan Equine Encephalomyelitis virus in the United States occurred in Florida in 1968.

ENCEPHALITIS – *(Continued from page 369)*

The 130 cases of arboviral encephalitis reported in 1968 are an increase from 83 cases in 1967 and reflect an increased number of cases of St. Louis encephalitis and Eastern equine encephalomyelitis in Illinois and New Jersey, respectively (Figure 2). In addition in 1968, the first recognized naturally acquired human case of Venezuelan equine encephalomyelitis in the United States occurred in Florida.

Figure 2
HUMAN CASES OF ARTHROPODBORNE ENCEPHALITIS BY STATE, 1968

Encephalitis associated with isolation of enteroviruses accounted for 137 of the reported cases in 1968. ECHO 30 and ECHO 9 were the most frequently isolated enteroviral types associated with encephalitis (Table 2).

In 1968, the number of cases of encephalitis associated with measles was 19 (1 fatal) (Table 3). This is the

Table 2
Cases of Encephalitis Associated with Enterovirus Isolation by Age Group and Type of Enterovirus

Age Group	Cox. A	Cox. B	ECHO 9	ECHO 30	Other	Total
<1	1					1
1-4	2	1	5	3	3	14
5-9	2	7	7	9	6	31
10-14	1	3	5	13	2	24
15-19		1	4	9		14
20-29	1	3	4	10	4	22
30-39		7	1	10		18
40+		1	1	1		3
Unknown			10			10
Total	7	23	37	55	15	137

Table 3
Encephalitis Associated with Childhood Illnesses

Etiology	Total Cases	Fatal Cases	Death/Case Ratio (Percent)
Measles	19	1	5.3
Mumps	408	2	.5
Chickenpox	69	17	24.6
Rubella	6	0	0
Total	502	20	4.0

Table 4
Reported Cases of Measles and Measles Encepholitis in the United States – 1960-1968

Year	Cases of Measles	Cases of Measles Encephalitis	Rate per 100,000 Measles Cases
1960	441,703	299	67.7
1961	423,919	276	65.1
1962	481,530	337	70.0
1963	385,156	239	62.1
1964	458,083	300	65.6
1965	261,904	171	65.3
1966	204,136	219	107.3
1967	62,705	62	98.9
1968	22,617	19	84.0

lowest figure yet reported: in 1967, there were 62 measles encephalitis cases (6 fatal) and in 1966, 219 (29 fatal) (Table 4). The number of cases of encephalitis associated with mumps in 1968 (48 cases, 2 fatal) (Table 3) was approximately one-half the number reported in 1967 (849 cases, 8 fatal). This reduction cannot be entirely explained by decreasing incidence of mumps in the United States between 1967 and 1968. The high death-to-case ratio for encephalitis associated with chickenpox (24.6 percent) (Table 3) suggests that many of these cases may be fatty degeneration of the viscera (Reye's Syndrome).

(Reported by Neurotropic Viral Diseases Unit, Viral Diseases Branch and the Statistical Services Activity, Epidemiology Program, NCDC.)

SUMMARY OF REPORTED CASES OF INFECTIOUS SYPHILIS

CASES OF PRIMARY AND SECONDARY SYPHILIS: By Reporting Areas September 1968 and September 1969 – Provisional Data

Reporting Area	September		Cumulative Jan. – Sept.		Reporting Area	September		Cumulative Jan. – Sept.	
	1969	1968	1969	1968		1969	1968	1969	1968
NEW ENGLAND	34	34	284	259	EAST SOUTH CENTRAL	100	77	749	1,049
Maine	2	–	7	3	Kentucky	7	12	122	90
New Hampshire	–	–	7	2	Tennessee	42	27	239	250
Vermont	–	–	1	–	Alabama	26	24	197	444
Massachusetts	17	27	167	163	Mississippi	25	14	191	265
Rhode Island	5	–	31	26					
Connecticut	10	7	71	65	WEST SOUTH CENTRAL	319	271	2,715	2,606
					Arkansas	24	14	161	101
MIDDLE ATLANTIC	324	330	2,889	2,514	Louisiana	57	58	527	642
Upstate New York	22	38	206	213	Oklahoma	6	4	57	58
New York City	201	222	1,988	1,592	Texas	232	195	1,970	1,805
Pa. (Excl. Phila.)	9	14	106	176					
Philadelphia	17	20	162	189	MOUNTAIN	68	31	480	370
New Jersey	75	36	427	344	Montana	2	1	8	7
					Idaho	2	–	8	2
EAST NORTH CENTRAL	259	247	1,951	2,137	Wyoming	–	–	5	2
Ohio	32	48	282	347	Colorado	1	2	35	15
Indiana	39	28	272	260	New Mexico	28	19	207	122
Downstate Illinois	25	24	196	142	Arizona	28	8	156	181
Chicago	90	76	693	753	Utah	1	–	13	8
Michigan	71	65	490	612	Nevada	6	1	48	33
Wisconsin	2	6	18	23					
					PACIFIC	200	171	1,501	1,169
WEST NORTH CENTRAL	38	31	277	284	Washington	5	–	44	35
Minnesota	7	4	39	38	Oregon	5	6	33	30
Iowa	4	5	30	31	California	188	163	1,414	1,197
Missouri	12	12	126	144	Alaska	2	1	6	2
North Dakota	2	1	10	5	Hawaii	–	1	4	5
South Dakota	6	4	15	30					
Nebraska	2	–	24	15	U. S. TOTAL	1,726	1,621	14,498	14,382
Kansas	5	5	33	21					
					TERRITORIES	101	71	894	850
SOUTH ATLANTIC	384	429	3,652	3,894	Puerto Rico	99	71	883	810
Delaware	3	4	33	27	Virgin Islands	2	–	11	40
Maryland	34	45	316	352					
District of Columbia	51	56	432	451					
Virginia	33	25	223	233					
West Virginia	2	–	15	27					
North Carolina	27	33	371	464					
South Carolina	48	46	437	395					
Georgia	80	88	785	673					
Florida	106	132	1,040	1,272					

Note: Cumulative Totals include revised and delayed reports through previous months.

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES, UNITED STATES

FOR WEEKS ENDED

OCTOBER 18, 1969 AND OCTOBER 19, 1968 - (42nd WEEK)

AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	DIPHTHERIA	ENCEPHALITIS			HEPATITIS			MALARIA	
				Primary including unsp. cases		Post-Infectious	Serum	Infectious			
	1969	1969	1969	1969	1968	1969	1969	1969	1968	1969	Cum. 1969
UNITED STATES...	79	3	3	31	37	3	107	947	1,027	153	2,459
NEW ENGLAND.....	4	–	–	1	2	–	3	119	61	2	79
Maine.*.....	–	–	–	–	–	–	–	11	6	–	6
New Hampshire.....	–	–	–	–	–	–	1	2	2	–	2
Vermont.....	–	–	–	–	–	–	–	2	5	–	–
Massachusetts.....	1	–	–	–	2	–	1	62	24	1	48
Rhode Island.....	2	–	–	–	–	–	1	17	6	–	9
Connecticut.....	1	–	–	1	–	–	–	25	18	1	14
MIDDLE ATLANTIC.....	21	–	–	1	6	–	40	136	186	19	284
New York City.....	–	–	–	–	–	–	23	40	57	–	22
New York, up-State.	2	–	–	1	1	–	–	10	31	3	46
New Jersey.....	8	–	–	–	2	–	17	53	51	10	117
Pennsylvania.....	11	–	–	–	3	–	–	33	47	6	99
EAST NORTH CENTRAL...	18	1	–	12	11	–	22	161	165	2	258
Ohio.....	12	–	–	8	10	–	7	43	35	1	23
Indiana.....	1	–	–	–	–	–	1	24	16	–	20
Illinois.....	2	1	–	1	1	–	5	23	55	–	160
Michigan.....	3	–	–	3	–	–	9	63	52	1	54
Wisconsin.....	–	–	–	–	–	–	–	8	7	–	1
WEST NORTH CENTRAL...	2	–	–	3	1	–	–	25	38	7	173
Minnesota.....	2	–	–	–	–	–	–	3	8	–	13
Iowa.*.....	–	–	–	1	–	–	–	7	8	–	18
Missouri.....	–	–	–	–	–	–	–	4	15	1	42
North Dakota.....	–	–	–	1	–	–	–	–	–	–	3
South Dakota.....	–	–	–	–	–	–	–	–	–	–	1
Nebraska.....	–	–	–	1	–	–	–	6	1	1	4
Kansas.....	–	–	–	–	1	–	–	5	6	5	92
SOUTH ATLANTIC.....	7	–	–	5	3	–	4	109	124	99	678
Delaware.....	–	–	–	–	–	–	–	5	–	–	3
Maryland.....	1	–	–	–	–	–	–	17	14	–	31
Dist. of Columbia..	–	–	–	–	–	–	–	1	1	–	2
Virginia.....	1	–	–	2	1	–	–	14	23	1	26
West Virginia.....	–	–	–	1	1	–	–	12	4	–	–
North Carolina.....	3	–	–	1	1	–	–	28	3	10	270
South Carolina.....	1	–	–	–	–	–	–	4	10	3	54
Georgia.....	–	–	–	–	–	–	–	9	17	84	258
Florida.....	1	–	–	1	–	–	4	19	52	1	34
EAST SOUTH CENTRAL...	5	2	–	2	1	2	–	57	84	1	111
Kentucky.....	2	–	–	–	–	2	–	24	42	1	86
Tennessee.....	–	2	–	2	1	–	–	14	18	–	–
Alabama.....	3	–	–	–	–	–	–	17	7	–	22
Mississippi.....	–	–	–	–	–	–	–	2	17	–	3
WEST SOUTH CENTRAL...	5	–	3	–	1	–	–	73	76	5	179
Arkansas.....	1	–	–	–	–	–	–	1	11	–	13
Louisiana.....	–	–	–	–	1	–	–	12	14	1	44
Oklahoma.....	–	–	–	–	–	–	–	7	4	4	58
Texas.....	4	–	3	–	–	–	–	53	47	–	64
MOUNTAIN.....	–	–	–	4	–	–	2	47	41	–	127
Montana.....	–	–	–	3	–	–	–	1	4	–	3
Idaho.....	–	–	–	–	–	–	–	–	9	–	3
Wyoming.....	–	–	–	1	–	–	–	4	–	–	–
Colorado.....	–	–	–	–	–	–	1	16	12	–	108
New Mexico.....	–	–	–	–	–	–	–	8	7	–	7
Arizona*.....	–	–	–	–	–	–	–	14	4	–	1
Utah.....	–	–	–	–	–	–	1	3	5	–	1
Nevada.....	–	–	–	–	–	–	–	1	–	–	4
PACIFIC.....	17	–	–	3	12	1	36	220	252	18	570
Washington.....	6	–	–	–	–	–	–	27	25	–	5
Oregon.....	–	–	–	1	–	–	–	16	16	–	14
California.....	11	–	–	2	12	1	36	172	205	7	444
Alaska.....	–	–	–	–	–	–	–	1	1	–	3
Hawaii.....	–	–	–	–	–	–	–	4	5	11	104
Puerto Rico.....	–	–	–	–	–	–	–	16	21	–	2

*Delayed reports: Diphtheria: Ariz. 1
Hepatitis, serum: Ariz. 6
Hepatitis, infectious: Me. 11, Ariz. 17
Malaria: Iowa 2

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

OCTOBER 18, 1969 AND OCTOBER 19, 1968 (42nd WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS	POLIOMYELITIS			RUBELLA
		Cumulative			Cumulative			Total	Paralytic		
	1969	1969	1968	1969	1969	1968	1969	1969	1969	Cum. 1969	1969
UNITED STATES...	125	21,142	20,258	32	2,501	2,161	897	–	–	14	312
NEW ENGLAND.....	2	1,122	1,170	2	99	125	100	–	–	2	22
Maine*.....	–	9	38	1	7	6	5	–	–	1	2
New Hampshire.....	–	239	141	–	3	7	2	–	–	–	–
Vermont.....	–	3	2	–	–	1	2	–	–	–	1
Massachusetts.....	1	223	363	–	38	64	36	–	–	–	10
Rhode Island.....	–	27	6	–	13	9	3	–	–	–	–
Connecticut.....	1	621	620	1	38	38	52	–	–	1	9
MIDDLE ATLANTIC.....	13	7,577	4,187	5	410	386	50	–	–	2	28
New York City.....	6	4,943	2,196	–	77	80	35	–	–	–	10
New York, Up-State.	1	606	1,240	–	79	69	NN	–	–	1	3
New Jersey.....	2	925	637	3	163	132	15	–	–	–	7
Pennsylvania.....	4	1,103	114	2	91	105	NN	–	–	1	8
EAST NORTH CENTRAL...	15	2,365	3,912	2	342	261	267	–	–	–	72
Ohio.....	1	394	298	2	126	72	20	–	–	–	6
Indiana.....	–	468	693	–	45	36	40	–	–	–	17
Illinois.....	6	582	1,381	–	49	58	72	–	–	–	7
Michigan.....	4	315	291	–	97	75	51	–	–	–	13
Wisconsin.....	4	606	1,249	–	25	20	84	–	–	–	29
WEST NORTH CENTRAL...	33	633	395	1	127	115	38	–	–	1	12
Minnesota.....	–	8	16	–	28	27	–	–	–	–	–
Iowa.....	–	332	104	1	19	8	34	–	–	–	10
Missouri.....	–	30	81	–	52	37	2	–	–	–	–
North Dakota.....	–	15	137	–	2	3	–	–	–	–	1
South Dakota.....	–	3	4	–	1	5	NN	–	–	–	–
Nebraska.....	33	238	43	–	9	8	2	–	–	–	1
Kansas.....	–	7	10	–	16	27	–	–	–	1	–
SOUTH ATLANTIC.....	5	2,580	1,534	10	437	432	91	–	–	1	35
Delaware.....	1	394	16	1	13	8	4	–	–	–	1
Maryland.....	–	77	103	–	40	36	5	–	–	–	2
Dist. of Columbia..	1	26	6	–	9	15	1	–	–	–	1
Virginia.....	1	886	302	1	55	40	10	–	–		12
West Virginia.....	1	212	294	–	19	13	43	–	–	–	13
North Carolina.....	–	318	284	5	77	83	NN	–	–	–	4
South Carolina.....	–	125	12	–	57	58	6	–	–	–	–
Georgia.....	–	2	4	1	73	86	–	–	–	–	–
Florida.....	1	540	513	2	94	93	22	–	–	1	2
EAST SOUTH CENTRAL...	–	113	500	6	156	197	34	–	–	1	26
Kentucky.....	–	66	103	3	54	90	5	–	–	–	2
Tennessee.....	–	17	62	3	61	57	23	–	–	–	21
Alabama.....	–	6	95	–	24	27	5	–	–	1	3
Mississippi.....	–	24	240	–	17	23	1	–	–	–	–
WEST SOUTH CENTRAL...	28	4,711	4,918	2	333	320	80	–	–	6	22
Arkansas.....	–	16	2	–	31	20	–	–	–	–	–
Louisiana.....	–	122	24	1	90	92	–	–	–	–	–
Oklahoma.....	–	142	125	–	31	50	23	–	–	–	8
Texas.....	28	4,431	4,767	1	181	158	57	–	–	6	14
MOUNTAIN.....	16	950	1,015	–	49	38	41	–	–	–	21
Montana.*.....	–	35	58	–	8	6	5	–	–	–	1
Idaho.....	1	90	21	–	11	11	3	–	–	–	–
Wyoming.....	–	–	53	–	–	2	–	–	–	–	1
Colorado.....	–	141	516	–	8	11	13	–	–	–	1
New Mexico.....	–	264	117	–	6	–	3	–	–	–	3
Arizona.*.....	15	409	224	–	10	4	11	–	–	–	8
Utah.....	–	10	21	–	4	1	6	–	–	–	7
Nevada.....	–	1	5	–	2	3	–	–	–	–	–
PACIFIC.....	13	1,091	2,627	4	548	287	196	–	–	1	74
Washington.....	–	62	551	–	56	45	63	–	–	–	30
Oregon.....	–	200	540	–	18	22	24	–	–	–	7
California.....	12	778	1,492	4	453	205	99	–	–	1	27
Alaska.....	–	9	9	–	11	3	8	–	–	–	3
Hawaii.....	1	42	35	–	10	12	2	–	–	–	7
Puerto Rico.....	41	1,667	436	–	19	20	16	–	–	–	12

*Delayed reports: Measles: Ariz. 17
Mumps: Me. 10, Ariz. 8
Rubella: Me. 1, Mont. delete 4, Ariz. 15

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

OCTOBER 18, 1969 AND OCTOBER 19, 1968 (42nd WEEK) - CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETANUS		TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969
UNITED STATES...	6,179	2	123	3	118	10	255	8	423	44	2,773
NEW ENGLAND.....	533	-	1	-	14	-	12	-	1	3	34
Maine.....	5	-	-	-	-	-	1	-	-	-	6
New Hampshire.....	24	-	-	-	-	-	-	-	-	1	5
Vermont.....	18	-	-	-	14	-	-	-	-	2	13
Massachusetts.....	152	-	1	-	-	-	7	-	1	-	2
Rhode Island.....	42	-	-	-	-	-	1	-	-	-	-
Connecticut.....	292	-	-	-	-	-	3	-	-	-	8
MIDDLE ATLANTIC.....	221	-	15	-	5	1	28	-	43	6	190
New York City.....	22	-	7	-	1	1	14	-	-	-	-
New York, Up-State.	152	-	3	-	4	-	6	-	7	6	177
New Jersey.....	NN	-	3	-	-	-	3	-	14	-	-
Pennsylvania.....	47	-	2	-	-	-	5	-	22	-	13
EAST NORTH CENTRAL...	587	-	17	-	13	3	29	-	3	5	202
Ohio.....	86	-	4	-	-	1	10	-	-	1	69
Indiana.....	121	-	-	-	2	-	-	-	-	-	48
Illinois.....	117	-	8	-	4	1	13	-	3	2	33
Michigan.....	172	-	5	-	-	1	5	-	-	-	7
Wisconsin.....	91	-	-	-	7	-	1	-	-	2	45
WEST NORTH CENTRAL...	318	-	11	1	14	-	10	-	8	5	509
Minnesota.....	13	-	3	-	--	-	4	-	-	1	135
Iowa.....	111	-	-	-	-	-	1	-	7	1	77
Missouri.....	15	-	4	1	10	-	3	-	-	-	127
North Dakota.....	67	-	-	-	-	-	-	-	-	1	67
South Dakota.....	41	-	-	-	-	-	-	-	1	-	24
Nebraska.....	55	-	-	-	1	-	1	-	-	-	13
Kansas.....	16	-	4	-	3	-	1	-	-	2	66
SOUTH ATLANTIC.....	815	-	21	-	21	2	39	8	239	9	671
Delaware.....	16	-	-	-	-	-	2	-	3	-	-
Maryland.....	66	-	1	-	-	-	4	-	47	-	3
Dist. of Columbia..	8	-	2	-	-	-	1	-	-	-	-
Virginia.....	282	-	-	-	4	-	1	6	81	4	337
West Virginia.....	189	-	1	-	2	-	2	-	5	3	97
North Carolina.....	NN	-	2	-	5	-	6	1	58	-	5
South Carolina.....	98	-	1	-	2	-	1	-	30	-	-
Georgia.....	5	-	4	-	4	2	11	1	15	2	73
Florida.....	151	-	10	-	4	-	11	-	-	-	156
EAST SOUTH CENTRAL...	1,175	-	18	1	13	-	35	-	62	4	365
Kentucky.*.....	162	-	7	-	-	-	8	-	13	1	187
Tennessee.....	710	-	4	1	12	-	19	-	41	2	125
Alabama.....	142	-	5	-	-	-	4	-	5	1	47
Mississippi.....	161	-	2	-	1	-	4	-	3	-	6
WEST SOUTH CENTRAL...	625	2	23	1	19	-	28	-	46	6	406
Arkansas.....	10	-	1	-	1	-	13	-	7	1	30
Louisiana.....	5	-	7	-	4	-	3	-	-	1	31
Oklahoma.....	33	-	1	1	8	-	-	-	28	-	61
Texas.....	577	2	14	-	6	-	12	-	11	4	284
MOUNTAIN.....	1,448	-	6	-	15	2	26	-	16	-	116
Montana.....	35	-	1	-	-	-	2	-	-	-	-
Idaho.....	225	-	-	-	-	1	4	-	5	-	-
Wyoming.....	195	-	-	-	2	-	5	-	-	-	53
Colorado.....	596	-	2	-	-	-	3	-	9	-	3
New Mexico.....	262	-	-	-	1	1	6	-	-	-	17
Arizona*.....	59	-	3	-	-	-	5	-	-	-	22
Utah.....	76	-	-	-	12	-	-	-	2	-	5
Nevada.....	-	-	-	-	-	-	1	-	-	-	16
PACIFIC.....	457	-	11	-	4	2	48	-	5	6	280
Washington.....	268	-	1	-	2	-	2	-	3	-	4
Oregon.....	55	-	-	-	1	-	6	-	-	-	4
California.....	---	-	10	-	1	2	37	-	2	6	272
Alaska.....	77	-	-	-	-	-	-	-	-	-	-
Hawaii.....	57	-	-	-	-	-	3	-	-	-	-
Puerto Rico.....	2	2	12	-	-	-	6	-	-	-	21

*Delayed reports: SST: Ky. 2, Ariz. 117

Week No. 42

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED OCTOBER 18, 1969

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over		
NEW ENGLAND:	713	447	45	25
Boston, Mass.	242	138	17	11
Bridgeport, Conn.	42	34	1	–
Cambridge, Mass.	23	18	6	–
Fall River, Mass.	24	18	–	1
Hartford, Conn.	50	27	1	3
Lowell, Mass.	22	10	2	2
Lynn, Mass.	21	13	1	–
New Bedford, Mass.	30	22	–	1
New Haven, Conn.	48	34	–	–
Providence, R. I.	60	37	6	4
Somerville, Mass.	12	9	3	1
Springfield, Mass.	55	31	5	2
Waterbury, Conn.	22	13	–	–
Worcester, Mass.	62	43	3	–
MIDDLE ATLANTIC:	3,151	1,843	134	136
Albany, N. Y.	36	19	1	3
Allentown, Pa.	34	24	4	–
Buffalo, N. Y.	128	78	1	5
Camden, N. J.	40	19	2	3
Elizabeth, N. J.	38	22	–	1
Erie, Pa.	38	22	6	4
Jersey City, N. J.	68	31	6	3
Newark, N. J.	79	42	3	5
New York City, N. Y.	1,665	984	72	66
Paterson, N. J.	31	14	–	2
Philadelphia, Pa.	399	218	6	23
Pittsburgh, Pa.	176	98	15	4
Reading, Pa.	56	30	2	2
Rochester, N. Y.	114	71	1	9
Schenectady, N. Y.	26	18	4	1
Scranton, Pa.	30	21	1	1
Syracuse, N. Y.	96	67	2	1
Trenton, N. J.	38	20	2	2
Utica, N. Y.	20	16	2	1
Yonkers, N. Y.	39	29	4	–
EAST NORTH CENTRAL:	2,522	1,393	78	127
Akron, Ohio	56	33	–	5
Canton, Ohio	33	20	1	3
Chicago, Ill.	752	395	19	31
Cincinnati, Ohio	194	112	4	8
Cleveland, Ohio	178	99	9	8
Columbus, Ohio	137	72	1	10
Dayton, Ohio	63	35	4	4
Detroit, Mich.	344	197	6	19
Evansville, Ind.	45	29	5	2
Flint, Mich.	42	23	2	2
Fort Wayne, Ind.	44	23	5	2
Gary, Ind.	27	9	2	1
Grand Rapids, Mich.	57	33	5	4
Indianapolis, Ind.	133	75	4	8
Madison, Wis.	24	10	1	–
Milwaukee, Wis.	123	62	2	3
Peoria, Ill.	42	20	–	3
Rockford, Ill.	28	19	3	3
South Bend, Ind.	36	14	–	7
Toledo, Ohio	106	77	3	2
Youngstown, Ohio	58	36	2	2
WEST NORTH CENTRAL:	868	516	27	50
Des Moines, Iowa	66	38	2	6
Duluth, Minn.	21	9	2	2
Kansas City, Kans.	45	25	2	4
Kansas City, Mo.	129	74	4	7
Lincoln, Nebr.	32	25	–	2
Minneapolis, Minn.	127	75	2	7
Omaha, Nebr.	95	67	6	3
St. Louis, Mo.	218	120	2	11
St. Paul, Minn.	75	45	1	2
Wichita, Kans.	60	38	6	6
Las Vegas, Nev.*	18	9	1	1
SOUTH ATLANTIC:	1,066	569	50	58
Atlanta, Ga.	135	48	10	8
Baltimore, Md.	209	123	1	5
Charlotte, N. C.	44	15	2	2
Jacksonville, Fla.	58	30	3	2
Miami, Fla.	58	28	–	3
Norfolk, Va.	60	36	11	6
Richmond, Va.	96	58	2	8
Savannah, Ga.	39	16	1	5
St. Petersburg, Fla.	72	58	6	4
Tampa, Fla.	65	43	10	4
Washington, D. C.	180	88	2	9
Wilmington, Del.	50	26	2	2
EAST SOUTH CENTRAL:	695	390	37	30
Birmingham, Ala.	117	62	2	8
Chattanooga, Tenn.	51	29	2	2
Knoxville, Tenn.	48	31	–	2
Louisville, Ky.	138	75	18	3
Memphis, Tenn.	132	70	2	5
Mobile, Ala.	59	30	3	3
Montgomery, Ala.	50	30	7	4
Nashville, Tenn.	100	63	3	3
WEST SOUTH CENTRAL:	1,248	612	39	99
Austin, Tex.	51	28	2	3
Baton Rouge, La.	52	25	–	7
Corpus Christi, Tex.	25	10	–	3
Dallas, Tex.	154	70	2	15
El Paso, Tex.	48	20	3	9
Fort Worth, Tex.	86	45	4	11
Houston, Tex.	250	111	2	8
Little Rock, Ark.	62	35	5	4
New Orleans, La.	162	76	7	12
Oklahoma City, Okla.	95	49	–	9
San Antonio, Tex.	131	60	2	13
Shreveport, La.	59	34	3	2
Tulsa, Okla.	73	49	9	3
MOUNTAIN:	444	248	22	27
Albuquerque, N. Mex.	29	15	2	2
Colorado Springs, Colo.	31	17	3	1
Denver, Colo.	119	66	6	6
Ogden, Utah	27	18	4	2
Phoenix, Ariz.	114	66	2	10
Pueblo, Colo.	17	10	2	–
Salt Lake City, Utah	55	29	1	4
Tucson, Ariz.	52	27	2	2
PACIFIC:	1,438	865	42	64
Berkeley, Calif.	25	13	2	1
Fresno, Calif.	44	31	–	1
Glendale, Calif.	21	15	–	–
Honolulu, Hawaii	44	26	3	1
Long Beach, Calif.	84	46	–	5
Los Angeles, Calif.	380	230	7	12
Oakland, Calif.	61	37	1	2
Pasadena, Calif.	37	29	2	2
Portland, Oreg.	109	71	4	2
Sacramento, Calif.	69	40	2	1
San Diego, Calif.	95	56	4	6
San Francisco, Calif.	175	90	2	11
San Jose, Calif.	32	22	1	2
Seattle, Wash.	158	82	11	16
Spokane, Wash.	56	46	2	1
Tacoma, Wash.	48	31	1	1
Total	12,145	6,883	474	616
Expected Number	12,076	6,956	375	511
Cumulative Total (includes reported corrections for previous weeks)	544,371	311,031	24,840	25,770

*Mortality data are being collected from Las Vegas, Nev., for possible inclusion in this table, however, for statistical reasons, these data will be listed only and not included in the total, expected number, or cumulative total, until 5 years of data are collected.

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DIRECTOR, EPIDEMIOLOGY PROGRAM — A. D. LANGMUIR, M.D.
EDITOR — MICHAEL B. GREGG, M.D.
EDITOR *pro tem* — ALAN R. HINMAN, M.D.
MANAGING EDITOR — PRISCILLA B. HOLMAN

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